

NOTE ON A POSSIBLE INTERMEDIATE HOST OF *SCHISTOSOMA HAEMATOBIMUM* IN THE GOLD COAST

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Attempts have been made on several occasions during the past eighteen months to determine the molluscan host or hosts of *Schistosoma haematobium* in the Gold Coast by exposing Bullinus-like snails, collected in pools and water-holes used as bathing places in the neighbourhood of Accra, to the attacks of miracidia hatched from ova obtained from the urine of cases of Bilharziasis in the colonial hospital. Three species of such snails are usually found in these bathing pools and they are, according to the identifications very kindly supplied by Colonel M. Conolly: *Isidora forskali*, Ehrn, *Physa waterloti*, Germain, and *Physopsis globosa*, Morelet. *I. forskali* is of much rarer occurrence than either of the others.

Dissections of specimens of these snails made as soon as they were brought to the laboratory, appeared to show that neither *I. forskali* nor *Physa waterloti* was naturally infected with furcocercous cercariae and no furcocercous cercariae were found in the livers of these species after they had been exposed to miracidia of *Schistosoma haematobium* and had been kept alive for a month to five weeks. On the other hand, dissection of newly-arrived specimens of *Physopsis globosa* showed an infection with furcocercous cercariae in 1.2 per cent. (2 in 165 examined), and 14 of 25 survivors of a lot of 76 of this species, exposed to miracidia of *S. haematobium* on the 9th July, were found to be infected with furcocercous cercariae when dissected on various dates between the 23rd August and the 16th September, 1923. It has, nevertheless, to be admitted that all attempts to infect rats with these cercariae proved unsuccessful; e.g. five *M. rattus* were placed in narrow glass cylinders and were kept for two hours semi-submerged in water to which had been added teased portions of livers of *Physopsis globosa* infected with furco-

cercous cercariae ; but although all the rats survived for more than six weeks after the experiment before dying or being killed, in no case were adult Schistosomata found in the liver or mesenteric veins. The dissection of three *M. decumanus* and of one *M. rattus* six to nine weeks after a similar exposure in water containing free-swimming cercariae, proved equally fruitless as regards the finding of Schistosomata in the livers or mesenteric veins, or the finding of ova in the bladders.

It may be noted that *Physopsis globosa*, Morelet, is the species of snail which Dye (quoted by Christopherson in a letter *Brit. Med. Jl.* of September 8, 1923, p. 437) in Nyasaland, observed to be attractive to the miracidia of *S. haematobium* and to be penetrated by them. It is, therefore, not unlikely that this species of snail can function as an intermediate host of *S. haematobium* in the Gold Coast.